

a short style, the latter less than 0.5 mm. long, the stigmas 5, usually distinct, white, radiating, sessile, oblique; fruit erect or vaguely falcate (dehiscent material not seen), linear-fusiform, up to 3 mm. long (here), acute at apex, the seeds short-transparent-winged, the wing (here) about 3 mm. long at one end (Fig. 1, a-g).

TYPE LOCALITY: Mt. Guayrapurina, Tarapoto, San Martin, Peru.

DISTRIBUTION: KNOWN from the States of San Martin and Loreto, Peru, and the State of Amazonas, Brazil.

PERU: San Martin: Tarapoto, *Spruce 4003* (F, photo., G,K, type collections of *Planchonella disticha*); Loreto: *Williams 5988* (F); Serro de Isco, *Ule 6716* (F, photo. and frag.). BRAZIL: Amazonas: São Paulo de Olivenca, *Krukoff 8908* (F, NY, type collection of *Krukoviella scandens*).

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A Botanist Leaves Hawaii*

OTTO DEGENER

The speaker, Collaborator in Hawaiian Botany at the New York Botanical Garden and resident of Hawaii since 1922, was feeding his tame pigeons on the lawn of his country home on Oahu one memorable December 7th morn when a score of planes roared overhead. As the peaceful pigeons were interested in the grain he held, and he was interested in the cooing and pirouetting pigeons, both parties ignored the noisy mechanical fliers. It was only hours later, after he tuned in on his radio and heard the frantic appeals for Dr. So-and-so, Dr. This and Dr. That—down the entire medical registry from A to Z—to report at the nearest hospital for disaster work that he realized something out of the ordinary had transpired. His 13-year old Hawaiian protege, who had bicycled to the village three miles away, on his return excitedly related how the occupant of a plane had shot at him and that a jump into a sugar cane tangle had saved him from harm, and how the shingle roof of his uncle's and *tutu's* house in the village had been riddled with bullet holes.

The radio blared for doctors; then with a minister's saintly voice, filled with anguish, it began to admonish and sooth the populace with Christ's

* Mr. Degener talked to the Torrey Botanical Club on April 18, 1945, on "Plant Life and Customs of the Hawaiian Islands." (TORREYA 45: 63. 1945.) When asked for an abstract of his talk he gave us this interesting account of how he happens to be in the Continental United States, which serves as an introduction to his abstract.

prayer "Father forgive them; for they know not what" . . . but was cut off the air abruptly; next it blared for more doctors; it ordered every one, except employees at the electric power plant, to remain indoors at home; it reproduced the familiar voice, now uncannily serious and sometimes broken, of his friend and former lawyer, Governor Poindexter, delivering a proclamation; and it warned all to keep their radios tuned for further instructions. The beach and roads swarmed with soldiers rushing about like a hill of disturbed ants. Civilian cars were halted with threat of bayonet, and turned back to their garages. The black-out at night was complete, with soldiers shooting from outside through the window panes at any light bulb left burning by some distraught or absent-minded civilian. Cigaret smoking was *kapu*, or taboo. The speaker not only unscrewed the light fuses but also turned off the electric switch for his entire house lest his 20-year old Hawaiian servant, paroled to him from the home for feeble-minded, might thoughtlessly light a light. Yet with all this man-made darkness, a volcano on the Island of Hawaii treacherously tried to aid the enemy by bursting out into a stream of red hot lava visible for hundreds of miles at sea.

The night of December 7, 1941, the speaker, the dull *kanaka* servant, the wide-awake protege, the all-hearing dog, watched the magnificent Fourth of July spectacle of powerful searchlights sweeping over the ocean with hazy beams in search of possible enemy landing parties. As a wave heaved and heaved upward, it was darkly visible; when it broke into an ever-enlarging glare of combers with bubbles, fine foam and spray, it was a dumbfounding sight to watch, while its reflection lit up the sky. The three human beings, all the while with cold fear gnawing at their hearts, were fascinated by the pitch blackness rhythmically followed by searchlight-swept spume. The dog, devoid of appreciation for this beautiful dramatic sight, was all ears. He was restlessly belligerent and noisily barked whenever he heard the unfamiliar footsteps and commands of soldiers in the garden, *his* garden whose every shrub and tree he knew and had personally blazed as his own property. Though Life and Death might be hanging imminently in the balance, the three human beings were helpless. Either nothing unusual would happen or an invading party might appear over the crests of the waves during the night and easily enough send them, with a few excruciating bayonet jabs, botanizing asclepiads along the Milky Way. The three, tired after a hectic day, lay down in vain to sleep; the dog, beside his master's couch, intermittently growling in stubborn defiance whenever footsteps crunched in the sandy garden.

Though the tropic night was comfortably warm, the inner side of the speaker's thighs started their paroxysms of trembling, trembling like the muscle of a horse that tries to dislodge a fly where neither weary head nor

docked tail can reach it; a trembling that had been forgotten since those early childhood nightmares when the visionary, painted Indian, with tomahawk raised aloft, was sneaking up nearer and nearer and ever yet nearer to one's once curly golden locks. Philosophical thoughts gradually reduced the frequency and intensity of the fitful trembling until from fifteen miles away, from the direction of Schofield Barracks, came a dull booming followed almost immediately by a crackling crunching crash. This booming and crash was thrice repeated. Stillness, only broken by the familiar swishing of the searchlight-brightened surf, followed. Renewed paroxysms of trembling came even though the speaker had not learned that the explosions and the immediate falling of crumbling masonry had heralded the return of enemy bombers to Schofield and signified the cruel mangling of hundreds of weary soldiers in the burning, twisted wreckage. Finally came the deep sleep of a fatigued soul and of an exhausted body bathed in cold sweat.

In the bright sunshine friendly but grim soldiers hailing from all regions of the Continental United States stood guard along the beach, dug trenches, erected barbed-wire entanglements, etc. One could tell their places of origin by their dialect: brawny hill-billies with Southern drawls; pale counting house clerks with broad "Hairvard" and "Airnold Airboretum" A's; clothiers with Bronx cheers; taxi drivers with Irish brogue; bow-legged Texans, with lady-like feet, conspicuously laconic; sun-tanned Californian orchardists jealously loquacious about Hawaii's "liquid sunshine"—Americans all.

We *kamaainas* or old timers in Hawaii of all possible racial backgrounds, felt closely knit together, with our homes and interests in immediate jeopardy. Special *aloha* was shown by many toward their *nisei* friends, *nisei* acquaintances and the *nisei* strangers within our islands. Conversely, these deeply dejected Americans of Japanese ancestry were particularly eager to show their unfailing loyalty to America and to show their unutterable shock at the dastardly acts of the war lords of their parent's fatherland. It was no surprise to people long resident in Hawaii and familiar with the *nisei*, when the military authorities recently proclaimed that not one act of sabotage had been committed by an Hawaiian *nisei* since Pearl Harbor. Moreover, many had fought valiantly and had died for their country on the battlefields of Europe and elsewhere.

The colonel coming to the house frankly stated that if the Japanese fleet, now not far distant, should loom over the horizon, his tanks would run parallel with the beach to butt and run down each and every house in the community. Occupants would be granted one hour to evacuate their belongings. This destruction was necessary so that enemy gunners stationed on nipponese warships could not so easily sight over a certain house, as a conspicuous landmark, to the flash of our defending guns concealed in the

neighboring forehills. A strip of barren beach would give the enemy less aid in sighting their targets.

A few days were spent by the speaker and his companions digging a large hole in the sand under a clump of towering casuarinas. With the aid of an old pianō box and many sand-filled burlap bags it formed a tolerable air-raid shelter. The soldiers began digging their very elaborate burrows at about the same time, unearthing in the neighboring lot a human skeleton. It was in a remarkable state of preservation due, no doubt, to the sea sand, in which the corpse had been interred, consisting of almost 100% bone—"bone" of coral, mollusk, echinoderm, fish and coralline algae. The man had died after the death of a loved one or of his chief as the absence of his two upper front teeth proved. In case of mourning, the Hawaiian formerly inserted a wedge between his two front teeth, gave it a sharp blow with a stone; knocked the wedge in twice toward the gum on the other side of both teeth and then extracted the loosened incisors as a token of grief.

In the beach house were almost twenty years' accumulation of Hawaiian herbarium specimens, the Philippine and Bornean collection of ferns purchased and received by bequest from the late D. LeRoy Topping, and much of the Anne Archbold—"Chêng Ho" collection of Fiji specimens including a new family or two. These plants to the speaker were almost as precious as life itself; to many others, far more precious. They had to be rescued from possible destruction.

The islands had been hard hit, harder than we liked to confess. Transportation to Honolulu and storage, for unappreciated dry plants when food and munitions needed transfer and housing, were not available. Days were spent removing excess newspaper from between duplicate herbarium specimens, packing the entire collection, and mailing it by insured parcel post to The New York Botanical Garden. Days were spent in interring in caves or other secret places family heirlooms, silverware, botanical source books like "Engler-Prantl" and the *Index Kewensis*, compound microscope, and other material too valuable to abandon to the enemy or to leave unprotected in a vacated house. As the gravid ceiling proved, the attic had been groaning for several years with unsold copies of Books 3 and 4 of the speaker's "*Flora Hawaiiensis*" or "New Illustrated Flora of the Hawaiian Islands." Considering the emergency it was judged wisest to evacuate all but about 250 copies of each of these two Books. The speaker therefore wrote to the main library in Honolulu for the loan of a library directory. As none was forthcoming, he consulted an old gazetteer listing all communities in the United States. Then the wrapping of Floras began in earnest, one book per package.

Quite safe in assuming that a community with a population of 5,000 or over boasted some kind of library, the speaker mailed one book to the public library of the first community of proper size listed in the gazetteer; he

mailed another to the next public library. He continued this procedure until all excess books were gone. He felt it better for his ego and for posterity to give away the greater part of his editions than to risk their complete oblivion by a well directed Japanese bomb. It was a tremendous task, particularly wrapping books by touch in a totally darkened house at night, with only the faint intermittent glare of the searchlights as they swept in long beams across the waves. With each book went an explanatory postal, more than hinting that four other profusely illustrated books written by the speaker were available at the regular, very reasonable price. Auto loads of plants and books left the beach house for the neighboring village post office, and the sale of stamps was large enough to raise the post office to a higher category of classification.

While this evacuation of botanical assets was proceeding, the speaker estimated that the first part of his task would be completed by February 1st. The next was to write the thousands of labels for the plants mailed to New York so that in the event of his eventual death, later workers could use the herbarium to full advantage. He therefore wrote the clipper company to reserve passage for two for the flight to California any day after February 1. The reply instructed him to be in Honolulu with his protege from that date on. As the clipper left for California at an undisclosed time and passengers received but one hour's notice of its departure, they had to be near the air field in Honolulu. If they missed the call for passage, they were placed at the very end of the list of reservations.

February 1st the speaker removed to his Honolulu house with his Hawaiian protege. It had been recently vacated by his tenant, an army officer, and the only furniture remaining was a Steinway concert grand piano, a white elephant, that would deteriorate if kept in the salt air of the beach house. The speaker borrowed two light mattresses, a porch table and two chairs from neighbors until clipper time should arrive, preparing to "camp" in the house with his protege in the meantime.

The amount of mail delivered to the Honolulu house twice daily increased like the bulk of a snowball rolling down hill. Besides letters of thanks from librarians, many with most interesting observations about the war, cash orders streamed in for the volumes not represented in the sample shipment. Such orders received immediate attention. Then out of a clear sky, like a bomb, the printer of his book on "Plants of Hawaii National Park," brought the unsold copies of that nontechnical work to his door with the announcement that the warehouse was needed by the government.

During all this time alerts and air-raid warnings were almost daily occurrences—often twice daily—and, after a while, the speaker simply filled his bath-tub with water and placed the mop inside as a possible fire-fighting weapon. Work was little interrupted as the botanical show must go on. An

entire block in the Moiliili District of Honolulu, a district mostly inhabited by Japanese, was a shambles due to enemy bombing. Eye-witness accounts by friends and by friends of friends hitherto always reliable, passed the rounds as well as idle rumors: how the enemy fliers flew low to slice off with their whirling propellers the head of any one so unfortunate as to be caught stranded on our air-fields; how exhausted one physician was from holding leg after leg during amputations, and the sudden great weight of the human leg as the knife has cut it clean from the body; how nauseated a surgeon's faithful wife became when she had to clean the clotted blood from his clothes and white tennis shoes after he returned dead tired in the early morning hours from the hospital; of the many instances of heroism by individuals; and, by the ignoring of unmistakable warnings, of the sale of Hawaii down the river by politicians in their effort to rouse the Nation.

The ceiling of the Honolulu house was threatening to give way under the weight of unsold copies of Books 1 and 2 of the "*Flora Hawaiiensis*" and of stored lares and penates. No commercial warehouse accepted anything for storage. To add copies of "Plants of Hawaii National Park" to the overburdened attic was impossible. Moreover, in those days Honolulu was safe neither from invasion nor from bombing. In fact, during the speaker's stay in Honolulu, two or three bombs were dropped one night back of the house in the lantana on Round Top from a Japanese plane. This had jettisoned its deadly load in its frantic escape from our pursuers. So while hugging the phone for the anticipated call for the clipper flight, the speaker and his protege wrapped and addressed additional thousands of books, using the piano as table, for mailing as gifts to additional thousands of public libraries. It was practically impossible to leave the house for fear of missing the clipper call. Thus they lived like prisoners from February 1st till May 28th—four months!—when the welcome call at length came. Carrying their baggage allowance of fifteen pounds each, they were whisked away at break-neck speed by limousine to board the plane moored in Pearl Harbor. This had been stripped of unnecessary trappings to reduce its total weight for the carrying of additional air mail and passengers during the emergency. The speaker, eager to see from the air the islands he had botanized for years, was sorely disappointed. So long as the plane was within sight of land, all windows were blacked-out lest passengers observe sights of strategic importance. Upon arrival in San Francisco, the hegira to The New York Botanical Garden continued by bus.

The speaker finally learned he was a suspect. His return from Fiji to Hawaii five months previous to Pearl Harbor, his attempts to induce the plantations to import as laborers native Fijians instead of additional Orientals, and his mailing thousands of books from Hawaii to each community of 5,000 population or over throughout the entire United States was most suspicious. Were not these Hawaiian Floras actually code books in disguise planted in public

libraries for the convenience of dangerous enemy aliens? The archives of a foreign government possesses a stack of documents over an inch thick regarding the speaker, and the F.B.I., subjected him to scrutiny for his botanical activities before he was granted a clean bill of health. Regarding the 250 copies each of Books 3 and 4 of his "*Flora Hawaiiensis*" left in his beach home in rural Hawaii, many were destroyed by strangers who broke into the house to pilfer and ravage. Consequently, the five volumes dealing with the plants of the Hawaiian Islands are now unavailable and very rare indeed.

The huge collection of plants shipped from Hawaii to New York consisted mainly of undetermined species laid between sheets of newspaper. On their margins had been scribbled pertinent field data in the speaker's private shorthand, unintelligible to any one except himself. With induction into one of the Services likely should the draft scrape the dregs loose from the bottom of the barrel of available man-power, it was imperative to label the collection quickly at least so far as field data were concerned. This herculean task was accomplished within the year. The best set of plants was reserved for The New York Botanical Garden; the second, for the Arnold Arboretum; and additional sets were donated or sold to other deserving institutions. Thus the chain of events begun with the bombing of Pearl Harbor not only induced the speaker to put his botanical house in order but enabled him to be available for the address delivered to the members of the Torrey Botanical Club in New York City, April 18, 1945, on "Plant Life and Customs of the Hawaiian Islands."

The lecture, first illustrated with lantern slides, very briefly reviewed the origin of the different Hawaiian Islands and how the Hawaiian Archipelago became clothed with vegetation. This was followed by a discussion of ancient Hawaiian customs. These to a very large extent coincide with the present-day customs of the South Sea Islanders who, due to the exigencies of war, have been suddenly thrown amidst the clashing members of the highly technological civilizations(?) of the Japanese and of the White Race. The lecture ended with motion pictures. These showed the Hawaiian Islands to be a kaleidoscope of many races and combinations of races, a condition which the influx of the most virile members of the warring factions into the South Sea Islands is rapidly duplicating. Old Mr. & Mrs. Smith of Virginia, old Mr. & Mrs. Jones of Boston, old Mr. & Mrs. Goldstein of Fordham, and old Mr. & Mrs. O'Bryan of lower Manhattan will get the surprise of their long lives when their nut-brown, clear-eyed, healthy and attractive Eurasian grandchildren come to live with them shortly after the armistice in the Pacific has been signed. They will meet as members of their own families a race of beings superior in many ways to the poor, pure, effete white man. The meeting concluded with refreshments.

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